



Trinity College Dublin

Coláiste na Tríonóide, Baile Átha Cliath

The University of Dublin

School of Engineering
MAI Handbook
Department of
Civil, Structural
and
Environmental
Engineering

2025/2026

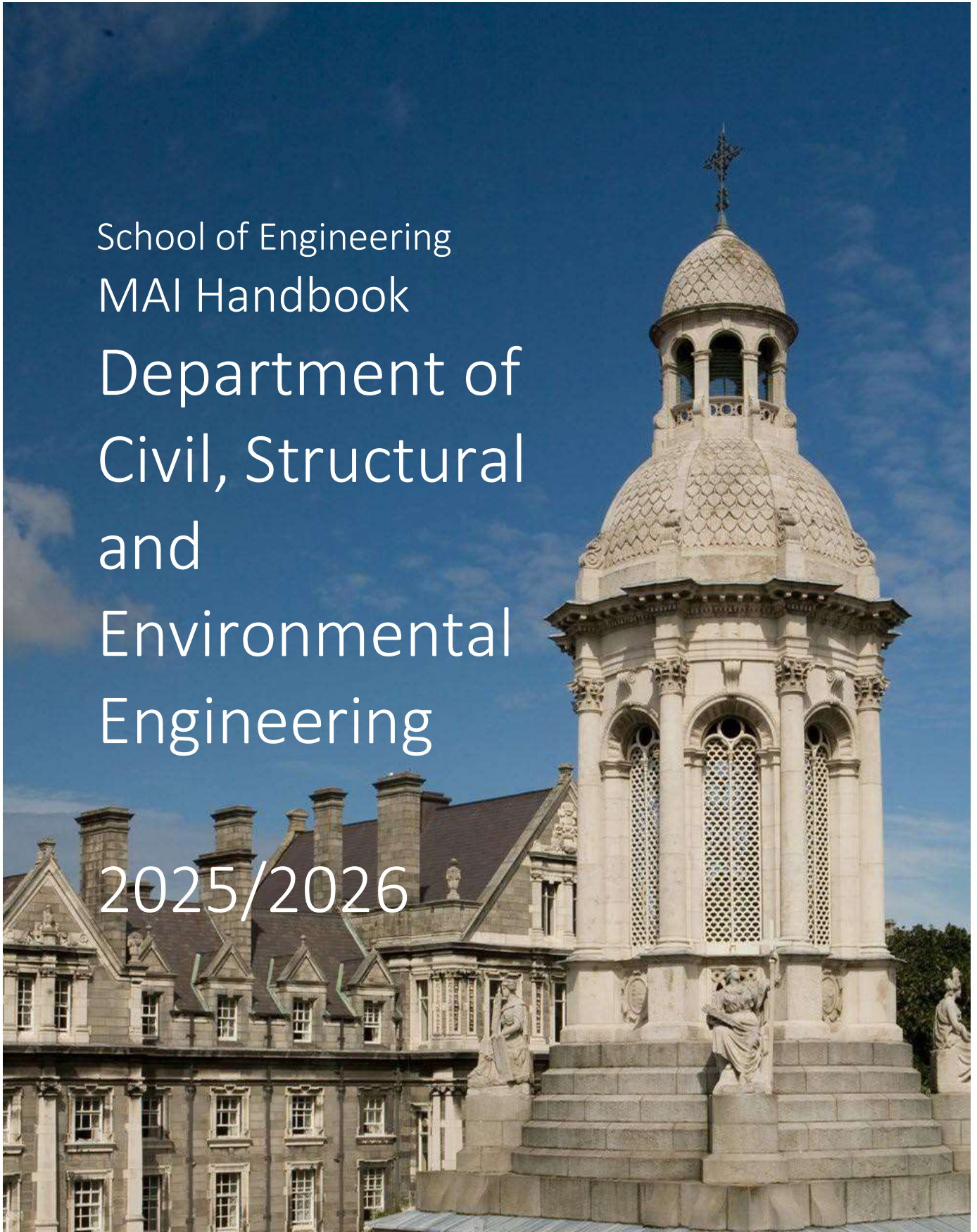


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1. GENERAL COURSE INFORMATION

1.1 Introduction

The MAI year consists of two semesters: lectures take place in Semester 1 and Semester 2; Examinations take place at the end of each semester.

All students complete a research project (CEP55E02) (30 ECTS) on which a dissertation must be prepared and submitted by the end of Semester 2 (by 11pm on Sunday, 12th April 2026).

In addition, students must take six elective modules, normally three in the Semester 1 and three in Semester 2, worth a total of 30 ECTS.

Students who wish to take four modules in either Semester 1 or Semester 2 must obtain permission from the MAI Co-ordinator. Typically this is only allowed if the extra module selected is required for (or the content is helpful for) the students research dissertation. An email of support from the project supervisor (stating that the extra module in a given semester would be beneficial for the students research) should be sent along with the request.

****Please note all module changes must occur in week 1 of the semester****

1.2 Contact Details

School of Engineering

School Office, Room 1.01, 1st Floor, Museum Building

Staff Name	Role/Title	Email address	Contact number
Prof. Anil Kokaram	Head of School	Anil.Kokaram@tcd.ie	01 896 1822
Ms. Patricia Hughes	School Manager	pahughes@tcd.ie	01 896 1796

Department of Civil, Structural & Environmental Engineering

Departmental Office, Room 1.01, 1st Floor, Museum Building

Office hours: Monday – Friday, 09:00 hrs until 13:00 hrs and 14:00 hrs until 17:00 hrs. Closed for lunch: 13:00 hrs until 14:00 hrs.
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Principal MAI contacts

Staff Name	Role/Title	Email address	Contact number
Asst. Prof. David Igoe	MAI Coordinator	david.igoie@tcd.ie	01 896 1822
Mr. Liam McCarthy	MAI Administrator, Departmental Office, Museum Building	lmccart4@tcd.ie	01 896 1457

Department of Civil, Structural and Environmental Engineering – Academic Staff

Asst. Prof. Muhammad Ali	BAI Coordinator	Muhammad.ali@tcd.ie	01 896 1743
Prof. Brian Broderick		bbrodrck@tcd.ie	01 896 2348
Prof. Biswajit Basu	CE7J06, module co-ordinator	basub@tcd.ie	01 896 2389
Prof. Brian Caulfield	CE7T02, module Co-ordinator	Brian.caulfield@tcd.ie	01 896 2534
Asst. Prof. Julie Clarke		Julie.clarke@tcd.ie	01 896 8053
Asst. Prof. Breiffni Fitzgerald	CE7J01, CE7C05, CE7S09, module co-ordinator	fitzgeb@tcd.ie	01 896 1638
Asst. Prof. John Gallagher	CEP55E03, CE7M01, CE7M04, module co-ordinator	j.gallagher@tcd.ie	01 896 1638
Asst. Prof. Mohammad Reza Ghaani	CE7M05, module co-ordinator	mohammad.ghaani@tcd.ie	01 896 5019
Assoc. Prof. Bidisha Ghosh	CE7T01, CE7T04, Module co-ordinator	bghosh@tcd.ie	01 896 3646
Prof. Laurence Gill	CE7E07, CE7E05, module co-ordinator	laurence.gill@tcd.ie	01 896 1047
Asst. Prof. John Hickey	CE7S03, module Co-ordinator	John.hickey@tcd.ie	01 896 XXXX
Asst. Prof. David Igoe	CE7S06, module Co-ordinator	igoed@tcd.ie	01 896 3805
Prof. Sarah McCormack	Head of Department CE7J02, CE7J04, module Co-ordinator	mccorms1@tcd.ie	01 896 3837
Asst. Prof. Patrick Morrissey	CE7C05, module Co-ordinator	Morrisp5@tcd.ie	01 896 5011
Prof. Alan O'Connor	CE7S04, module co-ordinator	Alan.oconnor@tcd.ie	01 896 1822

Academic Staff (continued)

Asst. Prof. David O'Connell	CE7E06, CEP55E06, module co-ordinator	David.oconnell@tcd.ie	01 896 XXXX
Assoc. Prof. Dermot O'Dwyer	CE5A62, CE7S02, module co-ordinator	dwodwyer@tcd.ie	01 896 2532
Assoc. Prof. Brendan O'Kelly	CE7S01, module Co-ordinator	Brendan.okelly@tcd.ie	01 896 2387
Prof. Margaret O'Mahony	CE7T05, module co-ordinator	Margaret.omahony@tcd.ie	01 896 2084
Assoc. Prof. Sara Pavia	CEP55E05, Module co-ordinator	pavias@tcd.ie	01 896 2516
Professor Karen Wiltshire, CRH Professor of Climate Science		wiltskhik@tcd.ie	To be confirmed.
Assoc. Prof. Liwen Xiao	CE7E04, module co-ordinator	liwen.xiao@tcd.ie	01 896 3741

Technical Support Staff

Mr. David Mc Aulay	Chief Technical Officer	David.mcaulay@tcd.ie	01 896 2386
Mr. Robert Fitzpatrick	Senior Technical Officer	Robert.fitzpatrick@tcd.ie	01 896 8578
Mr. Michael Grimes	Chief Technical Officer Specialist	Michael.grimes@tcd.ie	01 896 2388
Mr. Joseph O'Connell	Technical Officer	Joseph.oconnell@tcd.ie	01 896 1009
Mr. Patrick Veale	Environmental Technical Officer	vealep@tcd.ie	01 896 3013
Mr. Mark Gilligan	Senior Laboratory Attendant	gilligma@tcd.ie	01 896 2386
Dr. Owen Humphreys	Senior Technical Officer	owen.humphreys@tcd.ie	01 896 8578
Miss Gabriela Chmiel	Laboratory Attendant	chmielg@tcd.ie	01 896 2244

1.3 Key Locations

Our labs are located in the Simon Perry Building and in the Red Brick Building next to it (they are labelled “Civil Engineering” on the map on the next page).

The Departmental Office for Civil Structural and Environmental Engineering is located on the first floor of the Museum Building.

Our Academic Staff are located in the Simon Perry Building, the Red Brick Building and in Aras an Phiarsaigh.

References/Sources:

[Interactive College](#)

[Map Blackboard](#)

[Academic Registry](#)





1.4 Key Dates

Project Plan Presentations	All presentations done by EOD, Friday of the week 6 of S1
Literature Review (formerly designed as Interim Report, see below)	Sunday midnight S1 Week 11.
Dissertation	Sunday midnight S2 Week 12.
Vivas	All presentations done by EOD, Friday of S2 Week 15.

It is the responsibility of the student to submit all elements of the research project and to make sure that the markers have received the assignments in time. Engagement with the supervisors, laboratory technicians and progress in work on a continuous basis will be considered while marking the students on their efforts.

****Please note all module changes must occur in week 1 of the semester****

The full academic year structure for TCD is available via this link: [Academic Year Structure](#)

Trinity College Dublin

Academic Year Calendar 2026/27

The University of Dublin

Academic Calendar Week	Week beginning	2026/27 Academic Year Calendar		Term / Semester
		UG continuing years / PG all years	UG new first years	
1	31-Aug-26	Marking/Results 2025/26		← Michaelmas Term begins/Semester 1 begins
2	07-Sep-26	Marking/Results and Orientation (PG, Visiting,		

		Erasmus)		
3	14-Sep-26	Teaching and Learning	Orientation (JF UG)	← Michaelmas teaching term begins
4	21-Sep-26	Teaching and Learning	Teaching and Learning	
5	28-Sep-26	Teaching and Learning	Teaching and Learning	
6	05-Oct-26	Teaching and Learning	Teaching and Learning	
7	12-Oct-26	Teaching and Learning	Teaching and Learning	
8	19-Oct-26	Teaching and Learning	Teaching and Learning	
9	26-Oct-26	Study/Review (Monday, Public Holiday)	Study/Review (Monday, Public Holiday)	
10	02-Nov-26	Teaching and Learning	Teaching and Learning	
11	09-Nov-26	Teaching and Learning	Teaching and Learning	
12	16-Nov-26	Teaching and Learning	Teaching and Learning	
13	23-Nov-26	Teaching and Learning	Teaching and Learning	
14	30-Nov-26	Teaching and Learning	Teaching and Learning	
15	07-Dec-26	Revision / Assessment*	Revision / Assessment*	
16	14-Dec-26	Assessment*	Assessment*	← Michaelmas Term ends Sunday 20 December 2026/Semester 1 ends
17	21-Dec-26	Assessment* / Christmas	Assessment* / Christmas	
18	28-Dec-26	Christmas Period - College closed 24 December 2026 to 3 January 2027 inclusive	Christmas Period - College closed 24 December 2026 to 3 January 2027 inclusive	
19	04-Jan-27	Foundation Scholarship Examinations	Foundation Scholarship Examinations	
20	11-Jan-27	Marking***	Marking***	
21	18-Jan-27	Teaching and Learning	Teaching and Learning	← Hilary Term begins/Semester 2 begins; Hilary teaching term begins
22	25-Jan-27	Teaching and Learning	Teaching and Learning	
23	01-Feb-27	Teaching and Learning (Monday, Public Holiday)	Teaching and Learning (Monday, Public Holiday)	
24	08-Feb-	Teaching and Learning	Teaching and Learning	

25	27 15-Feb-27	Teaching and Learning	Teaching and Learning	
26	27 22-Feb-27	Teaching and Learning	Teaching and Learning	
27	27 01-Mar-27	Study/Review	Study/Review	
28	27 08-Mar-27	Teaching and Learning	Teaching and Learning	
29	27 15-Mar-27	Teaching and Learning (Wednesday, Public Holiday)	Teaching and Learning (Wednesday, Public Holiday)	
30	27 22-Mar-27	Teaching and Learning (Friday, Good Friday)	Teaching and Learning (Friday, Good Friday)	
31	27 29-Mar-27	Teaching and Learning (Monday, Easter Monday)	Teaching and Learning (Monday, Easter Monday)	
32	27 05-Apr-27	Teaching and Learning	Teaching and Learning	
33	27 12-Apr-27	Revision	Revision	
34	27 19-Apr-27	Assessment**	Assessment**	← Hilary Term ends Sunday 25 April 2027
35	27 26-Apr-27	Trinity Week (Monday, Trinity Monday) / Assessment**	Trinity Week (Monday, Trinity Monday) / Assessment**	← Trinity Term begins
36	27 03-May-27	Marking/Results (Monday, Public Holiday)	Marking/Results (Monday, Public Holiday)	
37	27 10-May-27	Marking/Results	Marking/Results	
38	27 17-May-27	Marking/Results	Marking/Results	
39	27 24-May-27	Research	Research	← Trinity Term ends Sunday 6 June 2027/Semester 2 ends
40	27 31-May-27	Research	Research	
41	27 07-Jun-27	Research (Monday, Public Holiday)	Research (Monday, Public Holiday)	
42	27 14-Jun-27	Research	Research	
43	27 21-Jun-27	Research	Research	
44	27 28-Jun-27	Research	Research	
45	27 05-Jul-27	Research	Research	
46	27 12-Jul-27	Research	Research	
47	27 19-Jul-27	Research	Research	

48	26-Jul-27	Research	Research	
49	02-Aug-27	Research (Monday, Public Holiday)	Research (Monday, Public Holiday)	
50	09-Aug-27	Research	Research	
51	16-Aug-27	Research	Research	
52	23-Aug-27	Reassessment 2026/27 - Semesters 1 & 2	Reassessment 2026/27 - Semesters 1 & 2	
* Semester 1 assessment session: December 11 to 22, 2026 inclusive (No assessment after Dec 22nd)				
** Semester 2 assessment session: April 19 to 30, 2027 inclusive				
*** Marking of Semester 1 assessments will continue into January and early February. Provisional Semester 1 results will be made available to students during the week commencing February 8, 2027				

Reference/Source:

[Academic Year](#)

[Structure](#)

1.5 Timetable

The MAI in Engineering timetable is available on the MyTCD site.

The timetable was made available on-line from 30 August 2025.

In addition, the MAI timetable will be issued with the handbook.

Any amendments to the MAI timetable will be circulated to the class by email.

Reference/Source: [My TCD](#)

2. SCHOLARSHIPS AND PRIZES

COLLEN PRIZES

These prizes were founded in 1957 by a gift from L.D.G. Collen, M.A., M.A.I. to encourage interest in current engineering practice. Six prizes are offered annually in the fifth year of the M.A.I. degree course, one in each of the following: (i) Biomedical Engineering, (ii) Civil, Structural and Environmental Engineering, (iii) Computer Engineering, (iv) Electronic and Electrical Engineering, (v) Mechanical and Manufacturing Engineering, (vi) Engineering with Management, for the best project or joint project on the nomination of the Head of stream. Value, €80 each.

M.A.I. STREAM PRIZES

These prizes were established in 2015 in order to recognise the best M.A.I. student in each of the engineering streams and are awarded annually to the student(s) obtaining the highest aggregate of marks at the annual M.A.I. examination. They are funded by the three departments in the School of Engineering and by the School of Computer Science and Statistics. Value, €300.

PROFESSOR JOHN FITZPATRICK PRIZE

This prize was established in 2013 by a bequest from the Department of Mechanical and Manufacturing Engineering in memory of the late Professor John Fitzpatrick, former Head of the School of Engineering and Chair of Mechanical Engineering. The prize is awarded annually to the best student in the M.A.I. (St.) degree as determined by the court of examiners. Value, not less than €400.

ACADEMIC WRITING

2.4 Academic Integrity and Referencing Guide

At Trinity College Dublin, we commit ourselves as staff and students to acting responsibly and ethically, embracing integrity in all our actions and interactions as members of the College community. Understanding that integrity requires honesty, transparency and accountability,

we agree to:

- Strive to do what we say we will, ensuring that we are aware of our commitments and responsibilities in order to fulfil them, and abiding by College and other relevant policies and the highest standards of conduct.
- Give credit where credit is due, recognizing and acknowledging the contributions and achievements of others in scholarship, teaching, research and service.
- Tell the truth, as a community and as individuals, speaking out and listening even when it is difficult, naming problems and honestly acknowledging mistakes.
- Hold ourselves and others to account for the things for which we are each responsible.
- Use resources for the purposes for which they are intended and be above reproach in financial dealings.
- Deal fairly, consistently and transparently with others.

Note: The submission of content (coursework or other materials) developed using Generative AI is strictly prohibited unless it is explicitly allowed in a module by the module coordinator.

General Regulations for Taught Graduate Programmes

The general regulations outlined in Section 1 apply as appropriate in addition to the following regulations specific to taught programmes.

1 Programmes of instruction leading to the higher degrees of B.D., D.Ch.Dent., D.Clin.Psych., D.Couns.Psych., D.Ed., LL.M., M.A.I., M.A.O., M.B.A., M.Ch., M.D., M.Ed., M.Phil., M.Phil.(Ecum.), M.Phil.(Peace Studies), M.Sc., M.Sc.(Mgmt.), M.St., M.S.W., Postgraduate Diplomas (P.Grad.Dip. and H.Dip. (Ed.) Primary Teaching) and Postgraduate Certificates (P.Grad.Cert.) are provided in approved subjects listed in this Calendar Part III. In all cases applications are competitively assessed and candidates who meet the minimum admission requirements set out in this Calendar Part III are not automatically awarded entry.

2 Some Masters programmes have the option of an exit Postgraduate Diploma when the taught component of the programme has been satisfactorily completed. Such P.Grad.Dip. programmes are, for completeness, listed under the appropriate Faculty entry but are not open to entry as separate options from their parent Masters programme i.e., students apply for entry to the appropriate Masters programme.

3 Students who have opted to receive a P.Grad.Dip. may apply to submit subsequently for the corresponding Masters degree. Following completion of the Masters requirements the student will inform the [Registrar](#) of their intention to rescind the P.Grad.Dip. and have the credit obtained during the P.Grad.Dip. integrated into the Masters degree. The student will be required to submit the original P.Grad.Dip. and/or any duplicates that have been issued. The time limit for applying to complete the credits required for the Masters degree will normally be up to 5 years following completion of the P.Grad.Dip. In exceptional circumstances, a longer time limit may be considered by the Dean of Graduate Studies. This arrangement is not available to students who exit with the P.Grad.Dip. as a consequence of failing to attain the pass requirements of the Masters.

4 Students who have opted to receive a P.Grad.Cert. may apply to submit subsequently for the corresponding P.Grad.Dip. and/or Masters degree. Following completion of the P.Grad.Dip. or Masters requirements the student will inform the Registrar of their intention to rescind the P.Grad. Cert. and have the credit obtained during the P.Grad.Cert. integrated into the P.Grad.Dip. or Masters degree. The student will be required to submit the original P.Grad.Cert. and/or any duplicates that have been issued. The time limit for applying to complete the credits for the P.Grad.Dip. and/or Masters degree will normally be up to 5 years following completion of the P.Grad.Cert. In exceptional circumstances, a longer time limit may be considered by the Dean of Graduate Studies. This arrangement is not available who exit with a P.Grad.Cert. as a consequence of failing to attain the pass requirements of the P.Grad.Dip./Masters.

5 All Postgraduate Diplomas may be awarded at two levels (i) Postgraduate Diploma and (ii) Postgraduate Diploma with Distinction.

6 All taught Masters Degrees may be awarded with Distinction. The award of a taught Masters with Distinction shall require the achievement of a distinction for the dissertation but may include additional conditions as specified by the programme committee. A distinction cannot be awarded if a candidate has failed any credit during the period of study. Criteria for the award of a distinction for the dissertation shall be approved by the relevant [Director of Teaching and Learning](#) (Postgraduate).

References/Sources:

[Calendar Part III, Section 1: General Regulations & Information, 'Academic](#)

[Integrity' Statement of Principles on Integrity](#)

[Academic Integrity Policy \(currently in development\)](#)

[Library Guides – Academic Integrity](#)

[Coversheet Declaration](#)

2.5 Research Ethics

The quest for knowledge and the betterment of society through research are central to the mission of Trinity College. It is essential that all of our research is conducted with integrity and that it adheres to the highest standards of ethical oversight. Research excellence in College is guided by the principles described in the Policy on Good Research Practice document (2002; updated in 2009) and these principles apply to all research conducted by staff and students under the auspices of Trinity College. In order to ensure that we continue to operate at the highest levels of excellence all policies in this area are continuously reviewed by the Research Ethics Policy Committee (REPC).

All research with impact has an ethical dimension and all researchers should reflect on the implications of their work, not just in terms of human (and animal) welfare and dignity, but also the social and cultural impact of their research. Funding agencies are placing increasing importance on ethics approval procedures and the scope of research areas requiring ethical review is growing.

References/Sources:

[Research Ethics](#)

[Policy on Good Research](#)

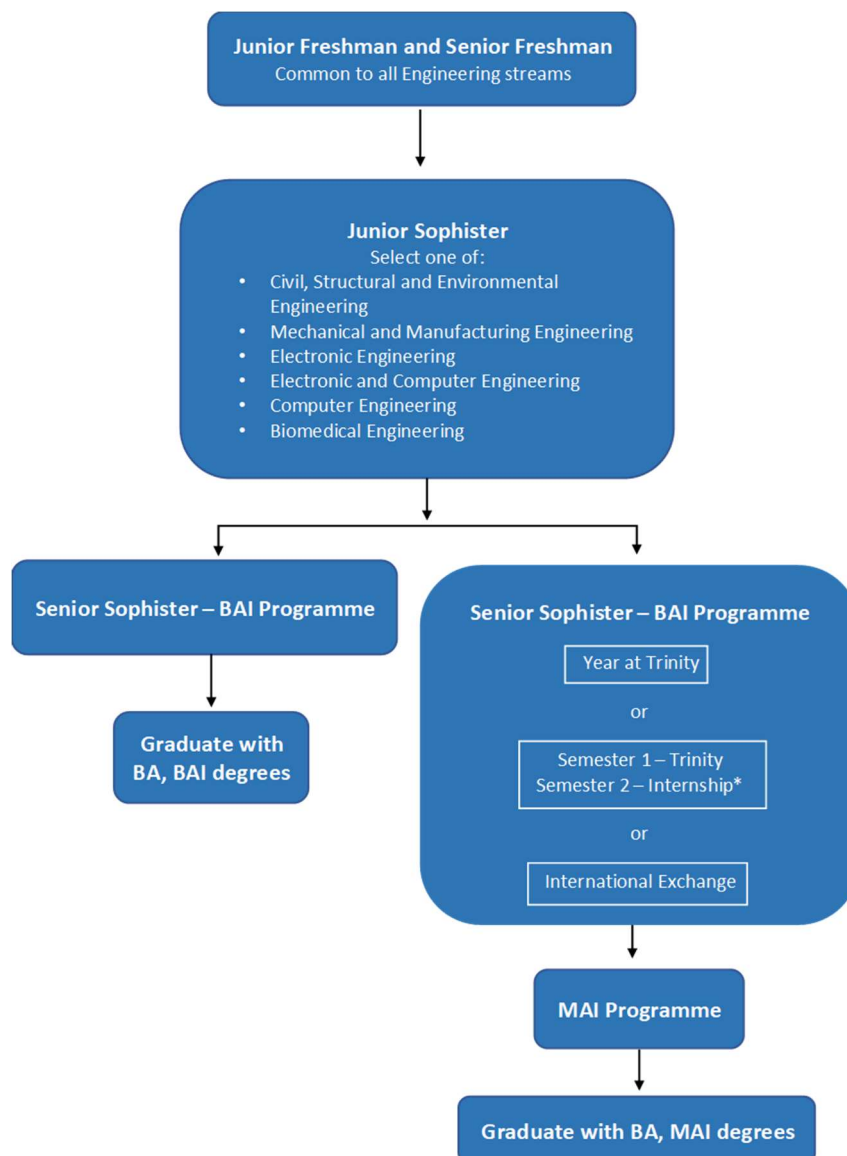
[Practice Ethics Policy](#)

3. TEACHING AND LEARNING

3.4 Programme Structure

The integrated BAI/MAI degree programme is professionally accredited by Engineers Ireland and meets the educational requirements for corporate membership of this professional institution and registration as a chartered engineer. Further information can be found at:

<http://www.engineersireland.ie/Membership.aspx>



3.5 Programme Structure and Workload

In your studies you should aim to work a minimum of 50 hours per week. With a timetabled schedule of about 25 hours per week, this means you should be planning independent study of at least 25 hours per week. This includes reading course material prior to lectures – you should not expect to be given all the module material in the lectures and tutorials. The table below details the modules, credit value and coordinator.

Module choices should be motivated by the topic of the MAI Project and no more than three electives should be taken in any one semester.

Module descriptors are available via the School of Engineering website [here](#)

Course Code	Module Title	ECTS	Semester	Coordinator
Mandatory Modules				
CEP55E02	Engineering Research Project	30		David Igoe
Semester 1 Electives				
CE7C05	C5 Advanced Spatial Analysis Using GIS	5	1	Patrick Morrissey
CEP55E03	Air Pollution: Monitoring, Assessment & Control	5	1	John Gallagher
CE7E07	E7 Sustainable Water Supply and Sanitation	5	1	Laurence Gill
CE7J02	J2 Solar Energy Conversion and Applications	5	1	Sarah McCormack
CE7J04	J4 Energy Policy and Demand	5	1	Brian Caulfield
CE7S02	S2 Advanced Structural Analysis	5	1	Dermot O'Dwyer
CE7S03	S3 Wind and Earthquake Engineerin	5	1	Brian Broderick
CE7S09	S9 Advanced Theory of Structures	5	1	Breiffni Fitzgerald

CE7T01	T1 Transportation Policy	5	1	Bidisha Ghosh
CE7T02	T2 Transport Modelling and Planning	5	1	Brian Caulfield
Semester 2 Electives				
CE7E05	E5 Water Quality and Hydrological Modelling	5	2	Laurence Gill
CE7E06	E6 Water Resource Planning and Climate Change	5	2	David O'Connell
CE7J01	J1 Wind Energy	5	2	Biswajit Basu
CE7J06	J6 Wave Energy	5	2	Biswajit Basu
CE7S01	S1 Geotechnical Engineering	5	2	Brendan O'Kelly
CE7S04	S4 Bridge Engineering	5	2	Alan O'Connor
CE7S06	S6 Soil-structure Interaction	5	2	David Igoe
CE7S07	S7 A Unified Theory of Structures	5	2	Roger West
CE7T04	T4 Transportation Data and Evaluation	5	2	Bidisha Ghosh
CE7T05	T5 Transport Design	5	2	Margaret O'Mahony

****Please note all module changes must occur in week 1 of the semester****

In addition to the above list of modules one appropriate Senior Sophister (SS) year module can be taken by MAI students and a second may be taken if permission is sought and granted by the MAI Coordinator.

To enable an appropriate fifth-year study plan for all students who go on internship in the second semester of their fourth year and for those students who have studied abroad for all or part of their fourth year, it will be allowable in some circumstances for fifth-year students to take up to 10 ECTS of appropriate fourth-year modules. These modules must be chosen so as to strengthen their chosen area of specialism and, where possible, also support their fifth year project work. The choice of modules for the fifth-year for all students intending on going on internship should be made with the agreement of the Head of Discipline or his/her delegate.

Note: timetabling requirements will prevail and may prevent particular combinations of modules which are acceptable from an academic perspective. In these limited cases where fifth-year students do take some fourth year modules (up to a maximum of 10 ECTS), different assessment procedures will apply, and hence different module codes and MAPS will be needed. In general, the pass requirement for fifth-year students will be 50%.

Funding of not more than €400 is available to each student to help with the costs of the Civil Engineering Research Project.

Reference/Source:

[Policy on Trinity Virtual Learning Environment](#)

3.6 Learning Outcomes

This course aims to develop engineers with specialist understanding in one of the areas: Environmental Engineering; Structural and Geotechnical Engineering; Transport and Planning Engineering; or Sustainable Energy Engineering. In addition, the course offers students the opportunity to obtain knowledge in complementary subject areas within the Civil Engineering Discipline.

3.7 Module Descriptors & Compulsory Reading Lists

The school reserves the right to amend the list of available modules and, in particular to withdraw and add modules. Timetabling may restrict the availability of modules to individual students.

Module descriptors are available on the School of Engineering website [here](#)

3.8 Coursework Requirements

Assignments and coursework should be submitted on-line on the module backboard page within the deadline as instructed by the module or coursework coordinator.

Policy on late submission

Coursework and assessment is an essential part of a student's learning to reinforce aspects of module content. For all years (JS/SS/MAI/MSc) and ALL modules within the Discipline of Civil, Structural and Environmental Engineering, late submissions may be penalized.

Policy on participation in continuous assessment-based modules

Students who are absent from a third of their lectures, tutorials or labs of a continuous assessment-based module or who fail to submit a third of the required coursework will be deemed non-satisfactory. Students reported as non-satisfactory for both semesters of a given year may be refused permission to take their examinations and may be required by the Senior Lecturer to repeat the year.

Further details of the procedure for reporting a student as non-satisfactory can be viewed on the [College Undergraduate Studies](#) website.

Reference/Source:

[Student Learning](#)

[Development Accessible](#)

[Information Policy](#)

3.9 Marking Scale

The following Descriptors are given as a guide to the qualities that assessors are seeking in relation to the grades usually awarded. A grade is the anticipated degree class based on consistent performance at the level indicated by an individual answer. In addition to the criteria listed examiners will also give credit for evidence of critical discussion of facts or evidence.

Guidelines on Grades for Essays and Examination Answers

Mark Range	Criteria
90-100	IDEAL ANSWER; showing insight and originality and wide knowledge. Logical, accurate and concise presentation. Evidence of reading and thought beyond course content. Contains particularly apt examples. Links materials from lectures, practicals and seminars where appropriate.
80-89	OUTSTANDING ANSWER; falls short of the 'ideal' answer either on aspects of presentation or on evidence of reading and thought beyond the course. Examples, layout and details are all sound.
70-79	MAINLY OUTSTANDING ANSWER; falls short on presentation and reading or thought beyond the course but retains insight and originality typical of first class work.
65-69	VERY COMPREHENSIVE ANSWER; good understanding of concepts supported by broad knowledge of subject. Notable for synthesis of information rather than originality. Sometimes with evidence of outside reading. Mostly accurate and logical with appropriate examples. Occasionally a lapse in detail.
60-64	LESS COMPREHENSIVE ANSWER; mostly confined to good recall of coursework. Some synthesis of information or ideas. Accurate and logical within a limited scope. Some lapses in detail tolerated.

55-59	SOUND BUT INCOMPLETE ANSWER; based on coursework alone but suffers from a significant omission, error or misunderstanding. Usually lacks synthesis of information or ideas. Mainly logical and accurate within its limited scope and
50-54	INCOMPLETE ANSWER; suffers from significant omissions, errors and misunderstandings, but still with understanding of main concepts and showing sound knowledge. Several lapses in detail.
45-49	WEAK ANSWER; limited understanding and knowledge of subject. Serious omissions, errors and misunderstandings, so that answer is no more than adequate.
40-44	VERY WEAK ANSWER; a poor answer, lacking substance but giving some relevant information. Information given may not be in context or well explained but will contain passages and words which indicate a marginally adequate understanding.
35-39	MARGINAL FAIL; inadequate answer, with no substance or understanding, but with a vague knowledge
30-34	CLEAR FAILURE; some attempt made to write something relevant to the question. Errors serious but not absurd. Could also be a sound answer to the misinterpretation of a question.
0-29	UTTER FAILURE; with little hint of knowledge. Errors serious and absurd. Could also be a trivial response to the misinterpretation of a question.

Guidelines on Marking Projects/Dissertation Assessment

(%)	Descriptors
90-100	Exceptional project report showing broad understanding of the project area and exceptional command of the relevant literature. Exemplary presentation and analysis of results, logical organisation and ability to critically evaluate and discuss results, coupled with insight and novelty/originality. The research conducted and results obtained are robust enough that, with appropriate academic guidance and additional work for manuscript preparation, they are suitable for publication in a reputable peer-reviewed scientific conference or journal. [about 2-3 students across the Engineering School]
80-89	An excellent project report clearly showing extensive reading beyond typical expectations, with a very good presentation and in-depth analysis of results. Demonstrates a strong ability to critically evaluate and discuss research findings within the relevant literature. Clear evidence of insight and originality. While exhibiting only minor shortcomings, this work presents strong foundational research that could, with some further academic assistance, be quickly developed into a short peer-reviewed conference paper (e.g., for a national conference), or into a more consequent publication with a bit more work (e.g., over a summer internship). [top 15-20% of students]
70-79	A very good project report showing evidence of wide reading, with clear presentation and thorough analysis of results and an ability to critically evaluate and discuss research findings in the context of relevant literature. Clear indication of some insight and novelty/originality. A very competent and well-presented report overall but falling short of excellence in some aspects. [top 75% of students]
60-69	A moderately good project report which shows a reasonably good understanding of the problem and some knowledge of the relevant literature. Mostly sound presentation and analysis of results but with occasional lapses. Some relevant interpretation and critical evaluation of results, though somewhat limited in scope. General standard of presentation and organisation adequate to good. [bottom 5-10% of the students]
50-59	A weak project report which shows some understanding of the problem but limited knowledge and appreciation of the relevant literature. Presentation, analysis and interpretation of the results at a basic level and showing little or no novelty/originality or critical evaluation. Insufficient attention to organisation/presentation of report.

	[bottom 2% of the students]
40-49	An unsatisfactory project report showing only limited understanding of the problem and superficial knowledge of the relevant literature. Results presented in a confused or inappropriate manner and incomplete or erroneous analysis. Discussion and interpretation of results severely limited, including some basic misapprehensions, and lacking any novelty/originality or critical evaluation. General standard of presentation poor.
20-39	A very poor project containing substantial errors and omissions. Very limited understanding, or in some cases misunderstanding of the problem and very restricted and superficial appreciation of the relevant literature. Very poor, confused and, in some cases, incomplete presentation of the results and limited analysis of the results including some serious errors. Severely limited discussion and interpretation of the results revealing little or no ability to relate experimental results to the existing literature. Very poor overall standard of presentation.
0-19	Exceptionally poor project report containing many errors, with almost no understanding of the problem and the literature pertaining to it. Chaotic presentation of results, and in some cases non-existent or inappropriate or plainly wrong analysis. Discussion and interpretation seriously confused or wholly erroneous revealing basic misapprehensions.

3.10 Attendance Requirements

Please note that attendance at lectures, tutorials and laboratory sessions is mandatory as is the submission of all work subject to continuous assessment. Regarding online teaching, attendance is mandatory at live lectures, tutorial and labs. Pre-recorded lectures should be viewed at the allocated slot on the timetable. Students who prove lacking in any of these elements may be issued with a Non-Satisfactory form and asked for an explanation for their poor attendance or performance. Students who do not provide a satisfactory explanation can be prevented from sitting the annual examinations.

The College Calendar outlining the College Policy on attendance and related issues, please look at page 46: <https://www.tcd.ie/calendar/graduate-studies-higher-degrees/section-III.pdf>

Reference/Source:

[Calendar Part III, Section I: General Regulations and Information, 'Attendance and Off-Books'; Section III 'Attendance, Registration, Extensions'; Section IV 'Attendance and Examinations'](#)

3.11 Absence from Examinations

ABSENCE FROM EXAMINATIONS

13 Postgraduate students who consider that illness may prevent them from attending an examination (or any part thereof) should consult their medical advisor and request a medical certificate for an appropriate period. If a certificate is granted, it must be presented to the student's Programme Co-ordinator/Director within three days of the beginning of the period of absence from the examination. Such medical certificates must state that the student is unfit to sit examinations. Medical certificates will not be accepted in explanation for poor performance; where an examination has been completed, subsequent withdrawal is not permitted. Further details of procedures subsequent to the submission of medical certificates are available in programme handbooks or from Programme Co-ordinators/Directors.

14 Postgraduate students who consider that other grave cause beyond their control may prevent them from attending an examination (or any part thereof) must consult and inform their Programme Co-ordinator/Director. The Programme Co-ordinator/Director will then make representations to the Dean of Graduate Studies requesting that permission be granted for absence from the examination.

15 The acceptance of medical disability is entirely at the discretion of the Dean of Graduate Studies, who may ask for a report from the medical officers in charge of the Student Health Service. The report will be strictly confidential to the Dean of Graduate Studies.

SPECIAL EXAMINATION ARRANGEMENTS

16 Students who may require assistance in examinations must discuss their needs with the Programme Co-ordinator/Director in advance of the examination so that special arrangements – such as dictation to an amanuensis – may be provided if feasible and appropriate. Such arrangements are made locally by the Programme Co-ordinator with the relevant Office(s) in College.

Reference/Source:

[Calendar Part III, Section III: 'Examinations, Assessment and Progression'; Section IV: 'Attendance and Examinations'](#)

[Academic Policies](#)

3.12 External Examiner

Professor David Butler

Head of Engineering and Professor of Water Engineering

School of Civil

Engineering, University of Exeter

Reference/Source:

[Procedure for the Transfer of Students' Assessed Work to External Examiners](#)

3.13 Progression Regulations

21 The following regulations apply in all courses of study leading to the award of a Masters degree or Postgraduate Diploma.

<https://www.tcd.ie/media/tcd/engineering/pdfs/current-students/Examination-Regulations.pdf>

There is no degree classification on the M.A.I. degree scroll as this award is published as either Pass or Fail but students are awarded a Pass with Distinction on their transcript if their mark greater than or equal to 70% in the examinations AND their mark is greater than or equal to 70% for the MAI Project, thereby achieving an overall weighted average of 70% or more. Those candidates achieving at least 70% in either the project or the examinations but not in both will not be awarded Distinction.

References/Sources:

[Calendar, Part III, Section III 'Examinations, Assessment and Progression' and 'Assessment and Progression Regulations'](#)

[National Framework for Qualifications Trinity Courses](#)

3.14 Awards

The National Framework of Qualifications (QQI)

The [National Framework of Qualifications](#) is a 10 – level system used to describe qualifications in the Irish education and training system.

Level 9 is typically considered postgraduate education as entry is reserved for those with undergraduate qualifications.

References/Sources:

[National Framework for
Qualifications Trinity Courses](#)

3.15 Professional and Statutory Body Accreditation (if applicable)

The integrated BAI/MAI degree programme is professionally accredited by Engineers Ireland and meets the educational requirements for corporate membership of this professional institution and registration as a chartered engineer.

Further information can be found at:

<http://www.engineersireland.ie/Membership.aspx>

3.16 Careers Information and Events

As a Trinity College Dublin student you have access to information, support and guidance from the professional team of Careers Consultants throughout your time at Trinity and for a year after you graduate. The support offered includes individual career guidance appointments, CV and LinkedIn profile clinics and practice interviews. The Trinity Careers Service and the School of Computer Science and Statistics also hold an annual Careers Fair in October which gives you the opportunity to find out about career prospects in a wide range of companies.. · Visit <https://www.tcd.ie/Careers/> for career and job search advice · Sign into MyCareer to book appointments, find information about vacancies and bursaries, and book your place on upcoming employer events. · Follow the service on Instagram for career news and advice @trinity.careers.service

Trinity College has a significant number of diverse student societies which are governed by the Central Societies Committee. They provide information on the societies including how to get involved and even how to start your own society. See <http://trinitysocieties.ie/> for more details. Students are encouraged to get involved.

Trinity College also has a huge range of sports clubs which are governed by the Dublin University Athletic Club (DUCAC). See http://www.tcd.ie/Sport/studentsport/ducac/?nodeId=94&title=Sports_Clubs for more details.

The Trinity College Students' Union (TCDSU) is run for students by students. TCDSU represent students at college level, fight for students' rights, look after students' needs, and are here for students to have a shoulder to cry on or as a friend to chat with over a cup of tea. Students of Trinity College are automatically members of TCDSU. It has information on accommodation, jobs, campaigns, as well as information pertaining to education and welfare.

For more information click here



3.17 Student Feedback and Evaluation

Student Evaluation

- Annual undergraduate module evaluation - administered at School/course office level. Schools have discretion to choose which type of evaluation best suits their needs and to design their own questions. Schools are required to report on the type of evaluation conducted for each module, how it communicated feedback to students and actions arising from the evaluation;
- Annual postgraduate taught course evaluation - evaluated on two occasions using agreed on-line template questionnaires - at the end of the taught component and at the time of submission of the dissertation. Faculty Offices are responsible for administering these surveys and on alternate years Schools may use other forms of evaluation at a local level.
- Trinity has developed a Procedure for the conduct of focus groups for student evaluation of modules and programmes. The Quality Office maintains a panel of trained focus group facilitators and notetakers. Schools and Disciplines can access the panel via the Quality.Office@tcd.ie email.
- Students surveys and focus groups are conducted as part of the programme review process.
- Students are asked to participate in meetings with Quality Reviewers.

Staff Evaluation

Staff surveys and focus groups are administered during Programme Reviews as a method of obtaining feedback.

References/Sources:

[Student Evaluation and](#)

[Feedback Student Partnership](#)

[Policy](#)

[Procedure for the conduct of Focus Groups for Student Feedback on Modules and Programmes](#)

School of Engineering

MAI Handbook Appendix 25/26

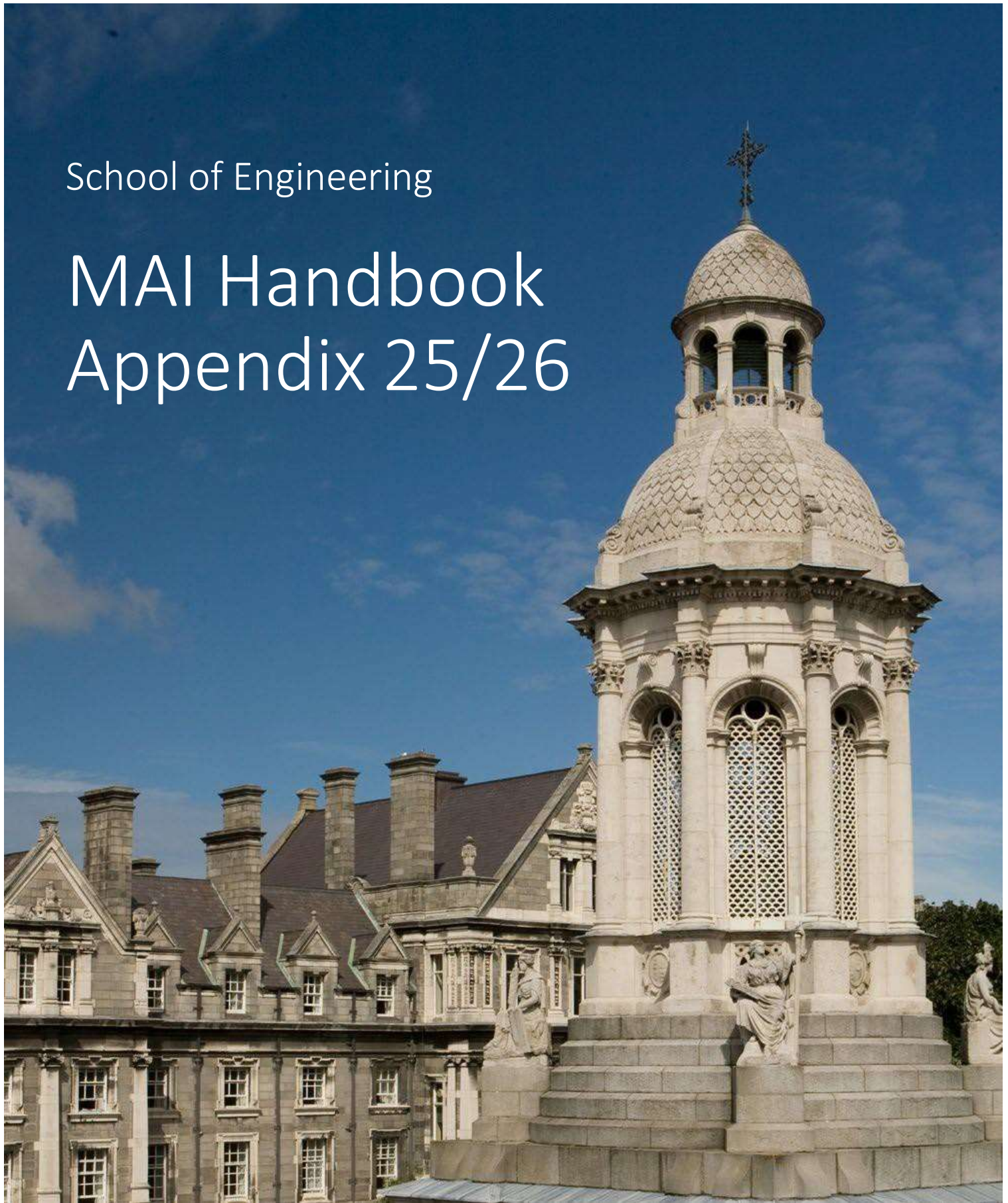


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[Trinity Visual Identity Guidelines](#)

[Accessible Information Policy](#)

Note: This document is a template for Schools/Disciplines. There may be additions/amendments appropriate to the needs of an individual School that reflect the local regulations of the School/Discipline and are in accordance with the Calendar.

1. GENERAL REGULATIONS

Standard Text: In the event of any conflict or inconsistency between the General Regulations published in the University Calendar and information contained in programme or local handbooks, the provisions of the General Regulations in the Calendar will prevail.

Reference/So

urce [Calendar](#)

[Calendar Part II, Part B: General Regulations and Information](#)

[Calendar Part III, Section 1: General Academic Regulations](#)

2. STUDENT SERVICES

[Student Services](#) has developed the handbook (embedded below) outlining the support services provided to undergraduate and postgraduate students. The handbook and further information is available from their website and in the [Student Services Handbook](#). School/Department Handbooks can provide a link to the PDF or embed the PDF within the Handbook itself.

Reference/Source: [Student Supports & Services](#)

Want to make
the most of your
student
experience?

[WWW.TCD.IE/
STUDENTS/
SUPPORTS-
SERVICES](http://WWW.TCD.IE/STUDENTS/SUPPORTS-SERVICES)

**Administrative
Support**

**Health and
Wellbeing
Support**

**Academic
Support**

Here to
help!

**Getting
Involved**

**Financial
Support**



Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Supporting your student experience

What to do
before you
assessments

[WWW.TCD.IE/
STUDENTS/
SUPPORTS-
SERVICES](http://WWW.TCD.IE/STUDENTS/SUPPORTS-SERVICES)



Supporting your student experience

I Trinity College Dublin
Common, Tronfide, Baile Atha, Oath
The University of Dublin

Want to keep
yourself well while
you're studying?

[WWW.TCD.IE/
STUDENTS/
SUPPORTS-
SERVICES](http://WWW.TCD.IE/STUDENTS/SUPPORTS-SERVICES)

Student Counselling

Mindfulness Monday
Wellbeing Wednesday
Support Groups
Counselling

Health Centre

GP service
Nurses
Physiotherapist
Emergency Clinics

Sport

Gym
Fitness Classes
Personal Trainers
Swimming Pool

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he.\£

Healthy Trinity

Healthy Eating
Smarter Travel
Sexual Health
Healthy habits

Chaplaincy

Christian Services
Prayer Rooms
Free lunch!

Student2 Student

Peer mentoring
Peer support

Supporting your student experience



Trinity College Dublin
COU. t111Trt0091de, Balli-Atla
ThiUn SotyofDubln

What is it like to be a student at Trinity College Dublin?
How do you get involved in student life?
What are the different student organizations?

WWW.TCD.IE/STUDENTS/SUPPORT-SERVICES

Students' Union

Sabbatical Officers
Class Reps
Campaigns

Societies

120 Societies

Clubs

50 Sports Clubs

Here to help!

Volunteering

Entrepreneurship

Global Room

Supporting your student experience

Trinity College Dublin
The University of Dublin

Having cashflow problems?

WWW.TCD.IE/
STUDENTS/
SUPPORTS-
SERVICES



Supporting your student experience



Trinity College Dublin
Coláiste na Tríonóide, Baile Átha Cliath
The University of Dublin

Student Learning Development	http://student-learning.tcd.ie/
The Library	http://www.tcd.ie/library/
Maths Help Room	http://maths.tcd.ie/outreach/helproom/
Undergraduate Programming Centre	http://www.scss.tcd.ie/misc/psc/

Language Learning Centre	http://www.tcd.ie/slscs/clcs/lhc/
English for Academic Purposes	https://www.tcd.ie/slscs/english/
Disability Service	http://www.tcd.ie/disability/
Careers Service	http://www.tcd.ie/Careers/

2.2 Health and Wellbeing Support

Student Counselling	http://www.tcd.ie/Student_Counselling/
Health Centre	http://www.tcd.ie/collegehealth/
Sport	http://www.tcd.ie/Sport/
Healthy Trinity	http://www.tcd.ie/healthytrinity/
Student2Student	http://student2student.tcd.ie/
Chaplaincy	http://www.tcd.ie/Chaplaincy/

2.3 Getting Involved

Students' Union	http://www.tcdsu.org/
Clubs	http://www.tcd.ie/Sport/student-sport/
Societies	http://trinitysocieties.ie/
Volunteering	http://www.tcd.ie/civicengagement/
Entrepreneurship/Tangent	http://www.tcd.ie/tangent/
Global Room	http://www.tcd.ie/study/international/trinity-life/global-room/
Senior Tutor's Office*	http://www.tcd.ie/seniortutor/students/undergraduate/financial-assistance/
Students' Union Welfare Loans	http://www.tcdsu.org/welfare/
Bursaries/Prizes (Undergraduate)	http://www.tcd.ie/calendar/undergraduate-studies/ (Part D: 11 - Prizes and other awards)
Bursaries/Prizes (Postgraduate)	https://www.tcd.ie/calendar/graduate-studies-higher-degrees/ (Section XI: Postgraduate Awards and Travel Funds)

Exhibitions	http://www.tcd.ie/calendar/undergraduate-studies/ (Part D: 8 - Entrance Awards)
Scholarships	http://www.tcd.ie/study/undergraduate/scholarships-funding/

*Remember, you can ask your Tutor for advice and guidance about anything and they will point you in the right direction

2.5 Administrative Support

Your Tutor	http://www.tcd.ie/seniortutor/
Postgraduate Advisory Service	http://www.tcd.ie/seniortutor/students/postgraduate
Academic Registry	http://www.tcd.ie/academicregistry/

2.6 Your Tutor

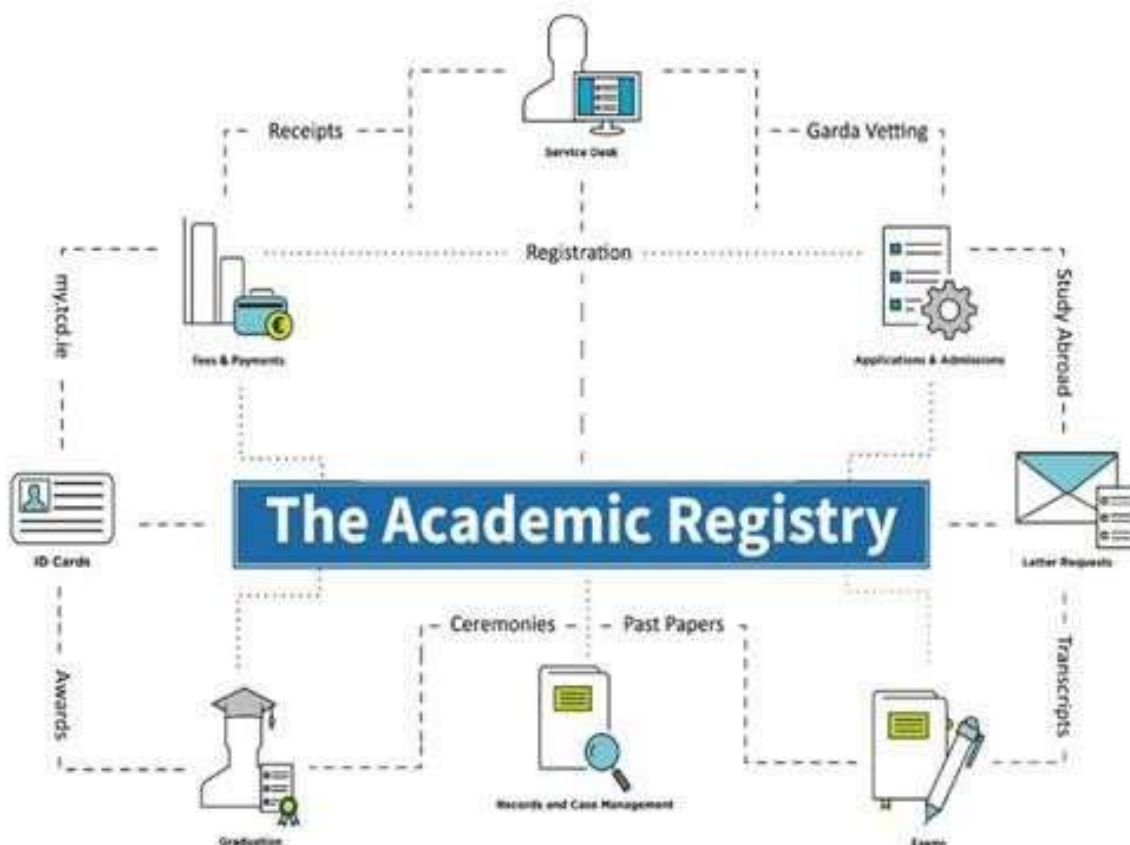
All registered full-degree undergraduate students are allocated a [Tutor](#) when starting in College. Your Tutor is a member of academic staff who is appointed to look after the general welfare and development of all students in their care. You should see your Tutor whenever you have a question or are worried or concerned about any aspect of College life or your personal life, in particular if it is affecting your academic work. Everything you say to your Tutor is in strict confidence. Unless you give them permission to do so, they will not give any information to anybody else, whether inside College or outside (not to your parents/family for example). Your Tutor can help you only if they know you are facing difficulties, so if you are worried about anything go and see your Tutor before things get out of hand. Whilst your Tutor may not be able to solve the underlying problem, they can help you find the best way to limit the impact of your situation on your College work. Tutors can help with academic advice, changing course, withdrawing from College, exam regulations, financial assistance and personal advice.

2.7 Postgraduate Advisory Service

The [Postgraduate Advisory Service](#) offers free, independent, and confidential support, guidance and advocacy to registered postgraduate students. They are here to provide support on any matter that may impact upon your time as a postgraduate at Trinity.

Some of the most common issues students come to PAS to discuss include: study-related stress or worry; concerns about academic progress; supervisor-relationship concerns; extensions and going off-books; queries regarding regulations and academic appeals; bullying; plagiarism and disciplinary cases, financial assistance.

2.8 The Academic Registry



2.9 Information on key campus locations

You may include information on key campus locations relevant to your School's students.

Reference/Source

[Student Supports & Services](#)

[Interactive College Map](#)

2.10 Student Representation and Governance

Information on the TCDSU student representation structures are available at the following links:

[TCDSU](#)

[TCDSU Student Representation Overview](#)

2.11 Careers Information

References/Sources:

[Trinity Careers Service](#)

[Careers - PG Focus](#)

3. ACADEMIC WRITING

3.1 Academic Integrity and Referencing Guide

Standard Text to be copied from the Calendar with a link to the Academic Integrity Policy (currently in development) included.

A **link** to the Library Guidelines on Academic Integrity and a link to the declaration text for submitted assignments.

Should there be **local policy** on referencing or programme copy of the coversheet declaration, relevant links and/or details to inform students.

References/Sources:

[Calendar Part II, Part B: General Regulations](#)

[Calendar Part III, Section 1: General Academic Regulations](#)

[Statement of Principles on Integrity](#)

[Academic Integrity Policy \(currently in development\)](#)

[Library Guides – Academic Integrity](#)

[Coversheet Declaration](#)

3.2 Research Ethics

On relevant programmes, Schools should provide relevant links and information regarding good practice in research, as well as provide information on College and Faculty policies and procedures.

[Research Ethics](#)

[Policy on Good Research Practice](#)

[Ethics Policy](#)

4. GENERAL INFORMATION

4.1 Emergency Procedure

In the event of an emergency, **dial Security Services on Extension 1999**

Security Services provide a 24-hour service to the College community, 365 days a year. They are the liaison to the Fire, Garda and Ambulance services and all staff and students are advised to always telephone Extension 1999 (+353 1 896 1999) in case of an emergency.

Should you require any emergency or rescue services on campus, you must contact Security Services. This includes chemical spills, personal injury or first aid assistance.

It is recommended that all students save at least one emergency contact in their phone under ICE (In Case of Emergency).

It is also recommended that students download the SafeZone app to access alerts for closures in inclement weather, etc.

4.2 Health and Safety Statements

We operate a 'safe working environment' policy and we take all practical precautions to ensure that hazards or accidents do not occur. We maintain safety whilst giving you the student very open access to facilities. Thus safety is also your personal responsibility and it is your duty to work in a safe manner. By adopting safe practices you ensure both your own safety and the safety of others.

Please read the following Safety Documents for working practices in the Department of Civil, Structural and Environmental Engineering:

<https://www.tcd.ie/civileng/facilities/health-and-safety/>

Assist. Professor David Igoe the member of the academic staff who deals with safety. If you have any questions or concerns relating to safety you should contact him at igoed@tcd.ie. Remember safety is everyone's concern, if you see something that is unsafe please notify us. Please ensure you comply with the instructions given in these important documents. Failure to behave in a safe manner may result in you being refused the use of departmental facilities.

4.3 Data Protection

Information on Data Protection regarding your student data is available from:

[Data Protection for Student Data](#)

4.4 Explanation of ECTSWeighting

The European Credit Transfer and Accumulation System (ECTS) is an academic credit system based on the estimated student workload required to achieve the objectives of a module or programme of study. It is designed to enable academic recognition for periods of study, to facilitate student mobility and credit accumulation and transfer. The ECTS is the recommended credit system for higher education in Ireland and across the European Higher Education Area.

The ECTS weighting for a module is a measure of the student input or workload required for that module, based on factors such as the number of contact hours, the number and length of written or verbally presented assessment exercises, class preparation and private study time, laboratory classes, examinations, clinical attendance, professional training placements, and so on as appropriate. There is no intrinsic relationship between the credit volume of a module and its level of difficulty.

The European norm for full-time study over one academic year is 60 credits. Within Undergraduate courses 1 credit represents 20-25 hours estimated student input, so a 10-credit module will be designed to require 200-250 hours of student input including class contact time, assessments and examinations. Within Postgraduate courses, 1 credit represents 25 hours estimated student input, so a 10-credit module will be designed to

require 200-250 hours of student input including class contact time, assessments and examinations.

ECTS credits are awarded to a student only upon successful completion of the programme year. Progression from one year to the next is determined by the programme regulations. Students who fail a year of their programme will not obtain credit for that year even if they have passed certain component. Exceptions to this rule are one-year and part-year visiting students, who are awarded credit for individual modules successfully completed.

Reference/Source:

[Description of ECTS for use in Course Handbooks](#)

4.5 Links to Further University Policies and Procedures

The following are links of where to find further information on University regulations, policies, and procedures that you may find useful as a student:

[All Academic Policies](#)

[Student Complaints Procedure](#)

[Dignity & Respect Policy](#)

[Equality Policy](#)